

REMARKS

Claims 1, 9 and 13 are amended; claims 2-3 and 5 are canceled; and claims 35-36 are added as new claims. Support is found, for example, at page 22, lines 23-26. No new matter is presented.

Claims 1-3, 5, 7-16, 23-28, and 33-34 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Hasegawa et al (Bull. Chem. Soc. Jpn 2000, 73, 423-428) or JP 8291106 in view of Ohuchida et al (US 6,201,021), Black (US 6,043,223), Toda et al (US 6,608,221) and Takada et al (US 2002/0022738 A1).

The Examiner did not find the arguments presented in the Response filed July 11, 2009 to be persuasive for the reasons set forth at pages 2-3 of the Action.

Specifically, with respect to the argument that there is no description in Black at all of sodium phosphate and stabilization, the Examiner contends that Black teaches the use of a phosphate buffer saline solution as a carrier for the bradykinin, which comprises 10-40 micrograms/mL of bradykinin and 0.09% phosphate buffered saline solution [col. 5, lines 41-45]. In this connection, the Examiner states that the purpose of buffer is to stabilize the components in it.

Further, the Examiner acknowledges Applicants' argument that Applicants solved the clouding problems of (2R)-2-propyloctanoic acid with their buffer conditions. However, the Examiner contends that the solubility and stabilization depends on the buffering conditions of the solvent. For example, according to the Examiner, Takada et al teach a process to improve the solubility of the drug compound and thereby providing a solution thereof and some kinds of drug

products using the solution improving the solubility of drug compounds by adding at least one pH adjuster selected from tri-sodium phosphate, a hydrate thereof, sodium hydroxide or potassium hydroxide to the solution see [0008 - 0010]. Therefore, the Examiner concludes that Applicants' claimed advantages are expected results.

The Examiner also acknowledges Applicants' argument that Hasegawa et al, Hisao et al and Ohuchida et al do not even recognize the problem solved by Applicants. However, the Examiner contends that the purpose of Hasegawa et al and Hisao et al is to show the optically active (R)-2-propyloctanoic acid and its use in treatment of neurodegenerative disorders. Ohuchida et al is said to teach suitable basic metal ions for the preparation of salts of pentanoic acid derivatives, which are relevant to Applicants' compound and its stability.

In summary, the Examiner concludes that it would have been obvious to a person of ordinary skill in the art at the time of the invention was made, with the teachings of the cited reference to make Applicants' claimed medicament with a reasonable expectation of success, since it is within the scope to optimize the conditions through routine experimentation.

Applicants traverse the rejection.

Applicants traverse the rejection for the reasons of record, which are incorporated herein by reference and further in view of the following.

Specifically, with respect to the Examiner's position regarding Black, Applicants have pointed out that Black teaches the use of sodium hydroxide to dissolve zaprinast and there is no teaching or suggestion of mixing (2R)-2-propyloctanoic acid with sodium phosphate or any other

basic metal ion as required by present claim 1. Further, as pointed out in the Response filed July 13, 2009, when the amount of the active ingredient and the basic metal ion in the pharmaceutical preparation of Black is calculated, the preparation is a “preparation which contains about 0.085 to about 10715 equivalents of the basic metal ion based on 1 equivalent of active ingredient, bradykinin”. Therefore, based on the equivalent number, the range of equivalents of the basic metal ion is very broad. Namely, more than 12,000 times of the basic metal ion based on 1 equivalent of active ingredient are included in the preparation in Black. On the other hand, the present invention solves the problems of clouding when diluted in order to formulate an injection appropriate for administration and difficulty in long-term storage by allowing coexistence of very narrow range of about 1 to about 5 equivalents of the basic metal ion based on 1 equivalent of (2R)-2-propyloctanoic acid or a salt thereof.

With respect to the Examiner’s reliance on Takada et al in support of the position that Applicants’ advantages are expected results, we Applicants have pointed out that Takada et al does not teach or suggest any similarity between the drug compound of Takada et al and (2R)-2-propyloctanoic acid or the salt thereof. Also, there is no teaching or suggestion that the pH adjusters used in Takada et al are useful for all water-insoluble compounds. Thus, there is no reason to combine the references as suggested by the Examiner with a reasonable expectation of success, much less with an expectation of achieving the claimed invention.

As for the Examiner’s reliance on Hasegawa et al, Hisao et al and Ohuchida et al, while Hasegawa et al Hisao et al relate to (2R)-2-propyloctanoic acid or a salt thereof, none teaches or suggests a medicament comprising (2R)-2-propyloctanoic acid and a basic metal ion. Further,

Applicants have pointed out in the Response filed July 13, 2009 that each of these references teach a salt of (2R)-2-propyloctanoic acid, but the present invention does not relate to a salt.

Toda also relates to formation of a (2R)-2-propyloctanoic acid or a salt thereof. Specifically, Toda et al relates to a process for the preparation of (2R)-2-propyloctanoic acid and one step in that process employs sodium hydroxide to extract a product, but this process is not related to a medicament comprising (2R)-2-propyloctanoic acid or a salt thereof and a basic metal ion. Sodium hydroxide is an optional component of the claimed invention and nowhere does Toda et al teach or suggest a basic metal ion as required in claim 1.

Moreover, as recognized and acknowledged by the Examiner, the cited references, whether taken alone or in combination, do not teach or suggest the problem solved by Applicants' nor the advantages of the claimed invention.

Accordingly, the present invention is not rendered obvious by the cited references, whether taken alone or in combination.

Even further, claim 1 is amended herein to recite that the claimed medicament comprises a micelle water dispersion liquid of components (a) and (b). This feature is not disclosed taught or suggested by any of the cited references. Thus, for this additional reason, the present invention is patentable over the cited references.

Accordingly, Applicants respectfully request withdrawal of the rejection.

New claims 35-36 also recite the feature of a micelle water dispersion liquid and are patentable for at least the same reasons.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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Respectfully submitted,



Susan J. Mack
Registration No. 30,951

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON DC SUGHRUE/265550

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CUSTOMER NUMBER

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